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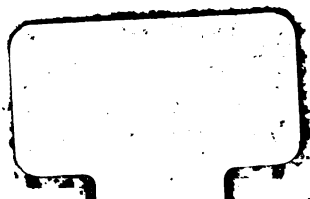
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HAMMAM RIRHA

DR. G. H. BRANDT





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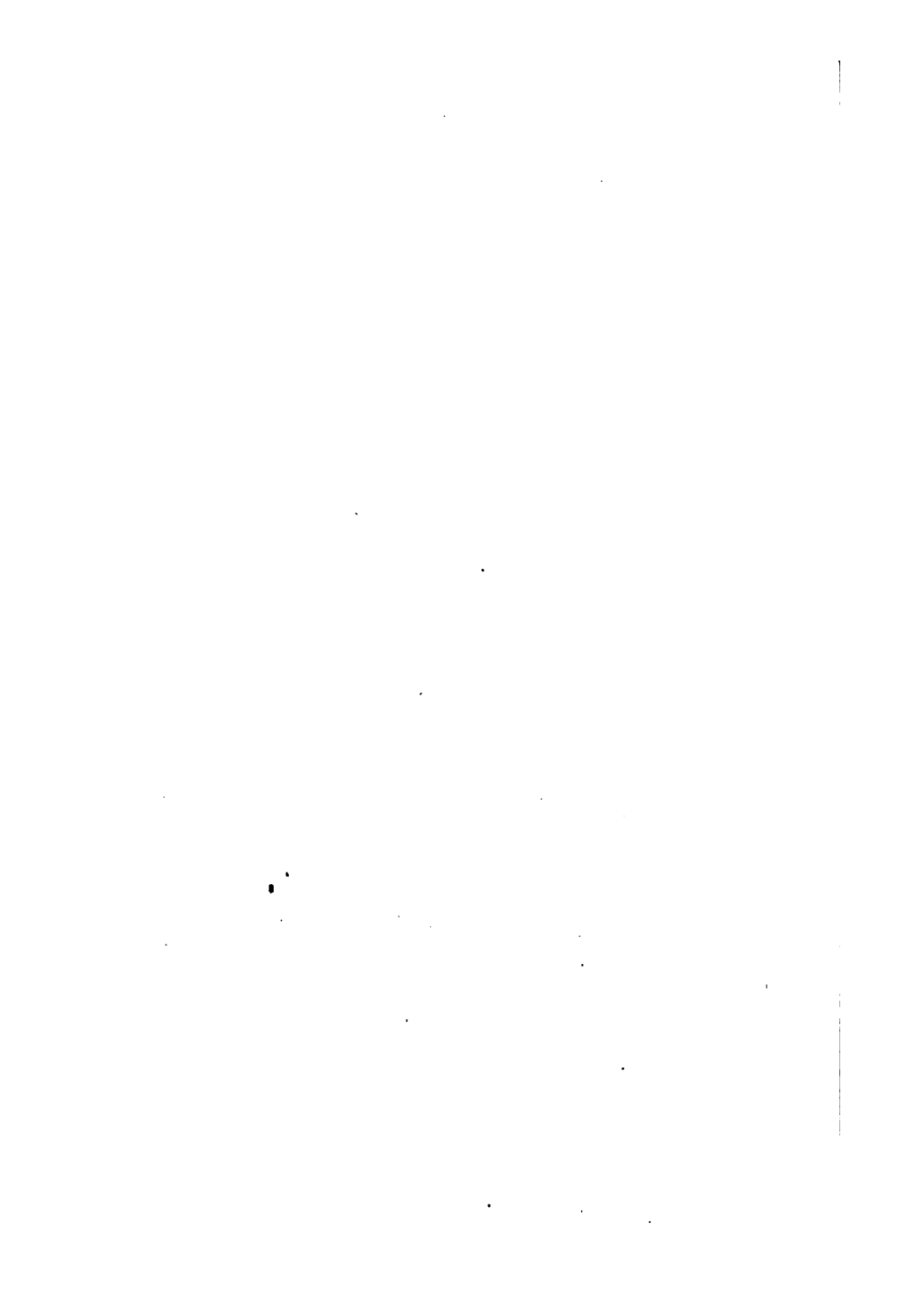
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VIEW OF NEW HOTEL AT HAMMAM RIRHA.



GENERAL VIEW OF HAMMAM RIRHA.

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1917

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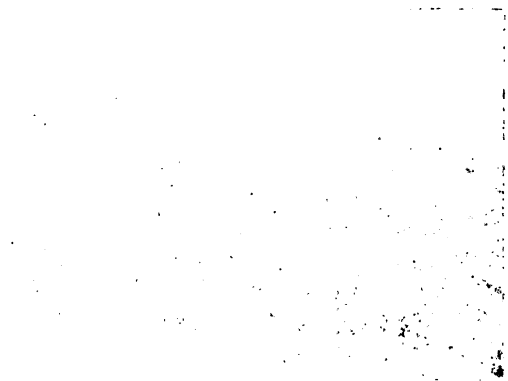
WILLIAM

1917

1917



1. The first is the *Journal of the American Medical Association*, which is the most widely read and influential of the medical journals.



HAMMAM RIRHA

ALGIERS

A

WINTER HEALTH RESORT

AND

MINERAL WATER CURE

COMBINED

BY

G. H. BRANDT, M.D.

LONDON

H. K. LEWIS, 136, GOWER STREET, W.C.

1883

151. 0. 708.



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HAMMAM RIRHA,

ALGIERS.



INTRODUCTION.

HITHERTO sufferers from chronic rheumatism and its allies have usually been obliged to wait until summer heat began, before they could go for their cure to one of the numerous watering-places in Europe, for in none of these, even the most southern, will the climate allow of a thermal mineral water cure being carried out during the cold winter months. Algiers is the only place where such a treatment can be safely attempted, and although situated in Africa, it is really nearer and more easily accessible to Central Europe than many places which, geographically speaking, are in Europe, such as Malta, Madeira, Sicily, and the Azores. It will therefore be a great boon for invalids to know that this region possesses

an excellent winter climate within easy reach (being only thirty-three hours from Marseilles), and where every comfort can be found that an invalid can wish for. The flourishing accounts I had heard from several people who had visited that place made me most anxious to pay it a visit, and judge for myself of its merits.

After leaving my summer quarters at Royat les Bains, I therefore started for Marseilles, crossed the Mediterranean, and landed at Algiers, after a pleasant trip of thirty-three hours. On landing I was much struck with the complete absence of sanitary arrangements in this city, and wonder how invalids can be tempted to reside there for health purposes. Mustapha Superior, a short distance from Algiers, is well situated on the slope of a hill, with charming villas, well surrounded by verdure, and commanding a good view of the Bay. It is chiefly inhabited by English, and it is a decided improvement on the dirty Franco-Arab town.

Being anxious to move on, I left Algiers by the morning train, arrived at the Bou-Medfa Station in three hours, and found there a comfortable conveyance, which took us up the hill in forty minutes to Hammam-Rirha, where we alighted on the 12th of

October. The place itself is lovely, surrounded by wonderful mountain scenery. The weather was perfect, bright sun, with a delightful cool, dry, and elastic air. I must not omit one very remarkable and important fact, and that is, the complete absence of dust, both during the journey by rail, and in the open carriage by the road leading to the top of the hill, although the ground had not felt rain for several weeks.

The few days I could dispose of were most agreeably spent, looking into everything, and conversing with several well-informed people who were either going through the water cure, or who had gone up for change of air. Most of them were residents at Algiers, and were enthusiastic about the effects of the change ; others, the rheumatic cases, were daily improving. The talk of the place was concentrated on the case of a gentleman who had been suffering from severe pains in the spine, with slight distortion and inability to walk ; divers diagnoses had been made, and divers methods of treatment had been applied, without any satisfactory result. It was at last thought it might be rheumatism, and he was sent to Hammam-Rirha on trial. This gentleman on the day of my arrival was at his seventeenth day of treatment,

and I saw him walk pretty freely with the simple aid of a stick ; his pains had almost entirely disappeared. Such a remarkable result pointed to the correctness of the rheumatic origin, and seems most encouraging to those who suffer from similar disorders.

I was anxious to try the effect of these hot baths, and, although I only stayed in the swimming-bath for five minutes, the symptoms I felt tallied with those described to me, viz., free perspiration, active peripheral circulation, and a sensation of lassitude, which only lasted for a very short time. The cold chalybeate water is excellent when mixed with wine, and is rather pleasant taken alone at the spring. As regards the climate at that time of the year, it was most enjoyable, the peculiar elastic and bracing feeling of the air was very delightful and invigorating after the hot dusty weather I had experienced in the town of Algiers and its environs. I gathered much valuable information from the military doctor in charge of the hospital, from several old stagers in Algiers, and also from a very intelligent Arab, who spoke French perfectly well, and who was thoroughly acquainted with the whole of Algeria. From what I gleaned it seems to me very clear that this region offers many advantages for the treatment of chest diseases ; its altitude,

2,000 feet above the sea level, its distance from all sources of infection, the equability and purity of its air, the uncommon advantages of possessing two kinds of valuable mineral springs available in many cases of disease, and last, but not least, the truly magnificent arrangements for the comfort of invalids at a moderate cost, which Monsieur Arlès-Dufour is carrying out, entitles this place to more than a passing notice. I think it will be filling a gap in our knowledge of winter resorts to bring before the profession a brief description of this place, and call their attention to what has already been written on the subject by some French authors, and particularly by two British colleagues, whose merit every one is acquainted with. I refer to Mr. G. D. Pollock and Dr. Lauder Brunton, who have both visited Hammam-Rirha. The fact also of the French Government in 1841 having selected this situation as a health resort for the army invalids is a recommendation of no mean import.

SITUATION.

Hamman-Rirha, or Hamman-Righa, is situated on one of the numerous projecting hills of the Lesser Atlas, at a distance of sixty miles S.W. of Algiers, and at about fifteen miles from the sea coast, twenty-four miles north-east of Milianah, and two miles from Vesoul-Benian, and at about the same altitude as this place, *i.e.*, 2,000 feet above the sea level. To the north one perceives a series of verdant hills, with winding Arab pathways running through gorges of great beauty. To the north-west a pine forest of about 2,000 acres extends as far as the Zakkar mountain, whose peak reaches an altitude of 5,600 feet, and dominates all this part of Algeria. To the east lies the valley of the Oued-Djer, over which seven ranges of hills are seen, until lost in the horizon.

HISTORY.

It is an ascertained fact, that wherever mineral waters of any value are found, one is sure to discover Roman remains. Such has been the case with

Hamмам Rirha, where not only baths, amphoræ, vases, coins, &c., have been found, but also the remains of the celebrated town of Aquæ Calidæ, which is known to have existed during the reign of Tiberius, A.D. 32-33. Some archeologists believe that it existed before the Romans, as some of the remains show indications of Phœnician work. Only recently a Roman piscina in an excellent state of preservation was found, and by some slight repair has been again made use of. Since the Roman epoch the Arabs have continued to avail themselves of Roman work, either by preserving or restoring some of their baths, and to the present day still make use of them either for the sake of health, or what is still more frequent, out of devotion to Sidi-Sliman, asking him, as they plunge into the mineral water, to cure their maladies. At the time I was there I had an opportunity of visiting the Arab quarter and baths; I found that they came in large numbers from all parts of the country, with flags and banners to this favourite resort. Here they spend most of the night in the piscina bath, getting in and out alternately, singing a monotonous kind of litany, sticking lighted tapers on the walls, and burning incense. After these ceremonies have lasted for a certain number of days they take food

and rest, before returning to their Gourbis.* During the war, which lasted many years, diseases of all kinds had caused great havoc among the French troops. Rheumatism, fevers of different types, chiefly intermittent; anæmia, syphilis, old gun-shot wounds, &c., had placed many of the rank and file on the sick list. The French Government required a healthy situation to construct a convalescent hospital in, and deputed some of its ablest medical officers to select a spot. Hammam Rirha was chosen as the best locality on account of its altitude, the pureness and bracing qualities of its air, and of its offering at the same time the advantage of possessing valuable mineral waters, both hot and cold, which in many cases would be available in the treatment of their invalids. The remarkable effects of climate and mineral waters soon spread over the country, and many civilians resorted to Hammam Rirha begging to be admitted into the hospital as places became vacant. In 1877 the enterprising Monsieur Arlès-Dufour, seeing the immense success of the locality, determined on building an appropriate establishment on a larger scale. He obtained from the French Government a concession for

* Name of the Arab hut, made of earth and branches of trees.

ninety-nine years of the Arab baths, the surrounding ground, and the pine forest, and completed his work to the satisfaction of the French inhabitants of Algiers and its environs. Success continued, several English invalids visited the place and derived considerable benefit. Monsieur Arlès-Dufour having lived in England for three years, soon perceived that what he had done was still insufficient for the number of people who flocked to the place, nor was it quite adapted to the requirements of first-class English patients. He therefore resolved on building, on a well selected site, a sanatorium of large dimensions, with every comfort that can be procured. It is this palace, for it is well worthy of the name, which is now sufficiently completed to accommodate eighty invalids. A description of it will be found further on in this volume.

CLIMATE.

One may say that the climate of Algeria is the maximum of the temperate countries of Europe, and the minimum of the hot countries of Africa. It is a resultant of the two climates, and it is different in

each of its great regions. It is naturally warm, owing to its position in the centre of the northern temperate zone; but it is singularly modified by its physical formation, *i.e.*, by its altitude, by its proximity to the sea, and contiguity to the great desert. We can therefore divide Algeria into five principal climates.

First. A maritime or littoral climate which is influenced by the sea air, and which possesses a cool season from November to April, and a hot season from May to October. It is characterized by a mean temperature of 18° C. or 64° F. and extreme temperatures of $28^{\circ}\cdot4$ and 86° .

Secondly. A mountainous climate of the "Tell" region, where the influence of the sea-breeze is but little felt. The mean temperature is 16° to 17° C. or $60^{\circ}\cdot8$ to $62^{\circ}\cdot6$ F. The extreme temperatures being -5° and $+32^{\circ}$ C.; or $=23^{\circ}$ and $+89^{\circ}\cdot6$ F.

Thirdly. A climate of the high plateaux of the steppes of the Alpha, where the continental influence predominates, the mean temperature is $+19^{\circ}$ C. or 66° F. The extreme mean temperatures being -5° and $+38^{\circ}$ C.; or $=23^{\circ}$ and $+100^{\circ}\cdot4$ F.

Fourthly. The Saharian climate, where the differences of temperature are very considerable, the mean temperature being $+23^{\circ}$ to 25° C. or $73^{\circ}\cdot4$ to 77° F.

and the extremes — 5 and + 43 C., or = 23° and + 109° to 113° F.

Finally, *Fifth*, a mixed climate, that of the high plateaux in the Province of Constantine, which combines the qualities of the mountainous region of the "Tell," and those of the high plateaux of the steppes of the Alpha, the extreme temperatures being — 0° and + 35° C. or 32° + 95° F. At Hammam Rirha the mean temperature is lower than at Algiers itself, it being at 9 A.M. 53° to 59°, at midday, 64° to 69°, and at 5 P.M. 53° to 59°. The heat of the sun is tempered by a cool refreshing breeze, which blows more especially in the afternoon. The amount of moisture varies considerably, but is rarely or never sufficient to cause the feeling of weight and depression from which people suffer on the coast of Algiers. According to Monsieur Bainier the difference of temperature in this region between summer and winter is only 8° or 10°, which shows its great equability. According to the same author the mean annual rainfall increases as one advances from the west to the east of Algeria. Thus from Oran to Algiers, Constantine and Tunis, it increases as the numbers 3, 4, 5 and 6, so that the greatest rainfall is at Constantine, and the lesser at Oran, Algiers holding a medium position. The town

of Oran receives annually a mean rainfall of 400 mm., or $15\frac{1}{2}$ inches, Algiers 800 mm., or 31 inches, Bone 1,200 mm., $46\frac{1}{2}$ inches. Although the quantity of rain which falls in Algiers is greater than in France, the number of days on which it rains is $2\frac{1}{2}$ times less and does not exceed 50 or 60 days per annum, these figures show that the rain falls in larger quantities at a time in Algeria than in France.

MINERAL WATERS AND BATHS.

In the *Practitioner* of April 1881, Dr. Lauder Brunton says :—

Hammam Rirha, the watering-place of which I propose to speak, is at present little known, but it combines many advantages which will in all probability cause it to be much frequented by-and-by. During a recent visit to Algiers I heard of it by a mere accident, and went to visit it simply in order to ascertain whether it might be recommended to patients affected with pulmonary diseases, as a change from the town of Algiers. To my surprise I found it was not this only, but much more ; for in

addition to an excellent climate it possesses a chalybeate spring for drinking purposes, warm saline springs for baths, and is surrounded by lovely scenery.

The present establishment consists of the military hospital, the Arab baths, a hotel for strangers, mostly English, and a dependence, to which is joined a farm. These buildings are situated at the edge of a small plateau about 1,600 feet above the sea-level, and looking towards the south-west. From the edge of this plateau a steep slope descends to the valley of Oued Hammam, and behind the plateau rises a low ridge. At first sight the Arab baths and the hotel appear to form one building, but the hotel being built on the very edge of the plateau and the Arab baths on the descending slope, the former rises above the latter ; and so rapid is the descent that the roof of the Arab bath is considerably lower than the ground floor of the hotel. The advantage of this position is that the water which has already supplied the baths of the hotel afterwards descends to the tanks of the Arab baths. The military hospital lies about a couple of hundred yards to one side, and the dependence about the same distance on the other side of the hotel. The hotel itself is built in the

form of a hollow square inclosing a courtyard planted with mulberry trees, and nearly divided into two by a projecting portion of the building in which the billiard room is situated. The building contains only one story excepting at the north side, where there is an upper story, consisting of bedrooms opening on balconies; the lower story being devoted to the baths.

At the south-east corner of the building is a large dining-room, and at the south-west corner is a comfortable drawing-room. Between these is a long passage, which fronts the south and is covered in with glass. In this invalids can take exercise when the weather renders it disagreeable or unadvisable to walk outside. The baths consist of two large tanks or shallow swimming-baths, smaller apartments for private baths or douches, and hot rooms where the patients may recline after the bath. These baths are abundantly supplied with hot water conveyed from the springs, which rise higher up the hill-side. The water is clear and bright, and the white floor and sides of the swimming-baths when seen through it acquire a beautiful cerulean blue colour. The temperature of the water at the fountain-head is 45° C. (113° F.), and in the swimming-baths it varies

between 42° and 44° C. (107° and 110° F.). The water belongs to the class of thermal salines, its most important ingredient being sulphate of lime. In its composition it agrees very closely with the water of Bath, or with the famous baths of Baden in Austria. The following analysis gives its ingredients more in detail :—

ANALYSIS OF THE HOT SPRING.

Temperature 45° C. (113° F.).

One litre of water contains the following substances :—

	Gramme
Carbonate of lime	0·207
Carbonate of magnesia	0·030
Sulphate of lime	1·303
Sulphate of magnesia	0·172
Sulphate of soda	0·017
Chloride of sodium	0·439
Chloride of potassium	0·091
Silicate of soda	0·069
Alum	0·002
Peroxide of Iron	small quantity
Total	2·330

When one enters the swimming-bath the water at first feels almost uncomfortably warm, but when the body is completely immersed in it the sensation is very agreeable. Both pulse and respiration are somewhat accelerated, and the skin becomes somewhat reddened. In a short time one generally begins to perspire, the action of the warm water being aided in this respect by the vapour with which the air is saturated. The baths are rarely taken for more than ten minutes or a quarter of an hour, and on coming out one feels a sensation of slight languor. If, as is usual, the person goes to bed, or reclines in the hot room after the bath, he generally perspires a good deal, and afterwards feels light and comfortable. The diseases in which these baths have been shown by actual experience to be useful are chronic rheumatism, articular or museular, gout, stiff tendons, erratic pains and neuralgias of rheumatic origin; and certain diseases and injuries of the osseous, lymphatic, circulatory, nervous and cutaneous systems.

The diseases of the bones in which they have proved useful are periostitis, caries, and badly consolidated fractures. They are very serviceable also in cases of old gun-shot wounds and painful

cicatrices, as well as in chronic ulcers. The diseases of the lymphatic, circulatory, nervous, and cutaneous systems to which I have already referred, are obstruction of the lymphatics, varicose veins, chorea, and syphilitic cutaneous affections. Patients suffering from prostatitis, and vesical or renal catarrh, have also been benefited by the baths; and catarrh and ulceration of the os uteri have yielded to the local application of the water in the form of a douche.

But its baths are not the only therapeutic advantages which Hammam Rirha enjoys. A little less than a mile distant is a chalybeate spring, which is conducted by pipes to a pavilion in which the water pours from a small fountain into a basin below. The water contains carbonate of iron and free carbonic acid as well as some salts, the proportions of which are given in the following analysis :—

ANALYSIS OF THE COLD CHALYBEATE
SPRING.

Temperature 19° C. (66°·20 F.)

One litre of water contains the following substances :—

	Gramme
Bicarbonate of iron	0·0100
Carbonic acid	0·8820
Bicarbonate of lime	0·9411
Bicarbonate of magnesia	0·0314
Bicarbonate of strontian, a small quantity.	
Bicarbonate of manganese	0·0008
Sulphide of calcium	0·5338
Sulphide of magnesium	0·1623
Sulphide of sodium	0·3425
Chloride of sodium	0·2801
Chloride of potassium, a small quantity.	
Silicate of soda	0·0240
Alum	0·0020
Organic substances, a small quantity	
Arsenic and phosphoric acid a small quantity.	
Total	<hr/> 3·2100

The quantity of iron is too small to render the

taste of the water disagreeable ; and the carbonic acid which it contains is sufficient to enable it to be used as a pleasant effervescing table-water. It is indeed generally used for this purpose at the hotel. It mixes perfectly with claret, but when quite fresh is said to discolour vermouth. It does not constipate, and indeed has rather a laxative action, probably from the salts it contains. Cases of obstinate constipation have yielded to the continued use of this water. One would naturally expect it would prove useful in cases of anæmia, chlorosis, and nervous diseases depending upon them. Experience has shown this to be the case ; and cases of dyspepsia also frequently yield rapidly to its use. It is useful also in cases of chronic hepatitis and affections of the liver, and persons suffering from malaria recover sometimes very rapidly under the combined use of the chalybeate water and the cold douche. It is slightly diuretic, and this property, combined with the astringent effect of the iron on catarrhal conditions of the pelvis or the kidney, is likely to render it useful, like the waters of Wildungen, in cases of renal calculus.

Warm baths and chalybeate waters are by no means exclusively the property of Hammam Rirha,

They are to be found all over Europe ; but the peculiarity of Hammam Rirha is the combination of baths and waters with a warm winter climate, so that patients can resort thither when the season of the European baths is over.

Amongst the greatest charms of Hammam Rirha are the scenery amidst which it stands, and the beautiful excursions which can be made in every direction around it, either riding or on foot.

The climate of Hammam Rirha renders it a suitable winter resort for cases of pulmonary disease, as well as for rhèumatism and gout. It is most useful in cases of phthisis occurring in persons of a lymphatic or strumous diathesis, and it is especially serviceable when dyspeptic complications are present. In cases of phthisis, where the temperature is high, it does more harm than good. Phthisical, or other patients residing at Hammam Rirha can easily descend to Algiers during the bad weather ; and even those who prefer to spend the greater part of their time at Algiers may find it a pleasant variation to make a short stay in Hammam Rirha.

The general aspect of the country very closely resembles that of many parts of the Scotch Highlands. The low scrub which covers many parts of

the hills when seen at a distance can hardly be distinguished from heather; while the wild olives and oleanders, which occur here and there singly or in thickets, might readily be mistaken for birch, willow, or hazel. The climate, too, increases the illusion. While walking about amongst the hills of Hammam Rirha in February, the mixture of warm sun and cool breeze gave me a feeling so nearly resembling that which I have had while walking amongst the hills of Perthshire or Argyleshire, that it was sometimes hardly possible to persuade myself that I had not been suddenly carried away from Algiers and put down in Scotland. Nor was it less pleasant if instead of walking over the heights one descended into the valleys by the steep foot-paths winding amongst the pine trees. Here the breeze was absent, although one might hear it rustling among the pine-tops; but its cooling effect was replaced by the shade which the thick pine-wood afforded from the sun. For those who are fond of sport there is a pine-forest of 1,800 acres, the shooting over which is free to all visitors to the hotel. Here the sportsman may find red-legged partridge, rabbits, and hares, as well as jackals, and

wild boar ; and he may occasionally get a shot at an eagle.

There are pleasant walks close to the hotel, but many of the best are too far to be taken on foot by patients who are suffering severely from rheumatism, gout, or pulmonary disease ; though even they may enjoy many of them by taking donkeys or mules. A new road is being made at present to the forest, and when it is finished, a few months hence, patients who are unable to ride or walk more than a few steps, will be able to drive to the forest and enjoy the pleasures of the woodland scene.

The whole surroundings of the place, indeed, are being laid out with very great judgment by M. Arlès-Dufour, who, besides being possessed of abundant capital, which he is expending most judiciously for invalids in general, has resided for some years in England, and is thoroughly acquainted with the feelings and requirements of Englishmen in particular. The hotel which he is building will be fitted with all the comforts which one meets with in the winter health-resorts in Switzerland, but misses in those of Spain and the southern shores of the Mediterranean.

Comfortable 'lodging and good food are such essential elements in a place whither invalids go in the hope of recovering, that in most cases no climate, however good, will make up for their absence ; and on account of their importance I shall on a future occasion give a more detailed account of the new hotel, so that those who may intend to recommend their patients to try a winter at Hammam Rirha, may be able to form a more precise judgment regarding its suitability for any particular cases.

THE NEW HOTEL.

In selecting a site on which to build this grand establishment, nothing could have been more judicious than to follow the example of the Romans. Monsieur Arlès-Dufour, therefore, chose the very spot, where the Roman town of Aquæ Calidæ once existed. It is on a higher level than any of the other establishments ; it stands at a distance of about two hundred yards from the nearest of them, and is, therefore, completely isolated. It forms a large quadrangle, composed of four wings, with a square

pavilion at each corner, and a garden in the centre. The front wing is occupied by a covered terrace, which connects the two front pavilions with each other; in the centre of this terrace is a wide staircase, which serves as the principal entrance to the building. The left wing is the one now completed, and is composed of a basement, a ground-floor, an entresol, and a first-floor. The basement is devoted to the mineral baths, and the hydrotherapeutic establishment—the arrangements consisting of two piscines, or swimming baths, of hot mineral water, the single baths, the spray rooms, the resting and sweating rooms, &c. The advantages of having the bathing establishment in the same building are great, as the invalid is not exposed to cold air, or draughts, being able to go from his room to the baths, and back again, walking, or being carried through a warm atmosphere. The ground floor immediately over this, runs along this wing from east to west, having a northern and southern aspect. The rooms to the north lead into a verandah which occupies the whole length of the building—300 feet by 13 feet 6 inches wide. The whole of this terrace is covered in with glass, which completely shelters it from the north wind, and affords an extensive walk

in all weathers. At the extreme ends of this floor there is a saloon, and a dining-room. The two floors above are similar to the lower one, the upper one having also a verandah like the one on the ground floor, over this is the flat roof of the house which is surrounded by a balustrade, and affords in fine weather a vast space for exercise. Besides the large saloon, there are reading-rooms as well as billiard and music rooms. The disadvantages of bad drainage, and even of good drainage badly kept, decided Monsieur Arlès-Dufour to adopt the dry-earth closet system, which gives excellent results, both in a sanitary, and economical point of view.

The advantages which this Sanatorium offers are numerous. Situated in the north of Africa, at an elevation of 2,000 feet, away from all sources of infection, possessing an equable, mild, dry, and bracing climate, surrounded by pleasant walks, without dust, and where one can breathe an aseptic air, easily accessible from Europe, and possessing, at the same time, all the comforts that can possibly be wished for, not forgetting an abundant supply of excellent food, and an exquisite cuisine, is certainly an inducement for invalids who seek a health resort ;

added to these advantages are those of a valuable thermo-mineral spring which flows into the same establishment, and which can be most usefully employed in the internal treatment of chest diseases, as well as externally in rheumatic affections. The cold chalybeate spring is also of great value in numerous cases in which iron is indicated. I know of no place where such advantages are to be met with, and great credit is due to Monsieur Arlès-Dufour for carrying out such complete arrangements for the comfort and well-being of those who may wish to seek health away from home.

HAMMAM RIRHA.—The following account of the new hotel at Hamman Rirha is given in the *Practitioner*, vol. xxix. p. 386.

The new buildings are laid out on a most extensive plan indeed, so as to include not only what is wanted for the comfort of invalids, but all the amusements of a complete watering-place.

It is proposed at present, however, not to finish the whole building, but only the one wing, and leaving the chapel, theatre, &c., to be completed afterwards. The one wing which is now finished, and which will be occupied about the 15th or 20th of November, will contain about eighty bedrooms,

dining-room, several private rooms for breakfast and for persons who do not wish to dine at *table d'hôte*, and a large saloon covering an area of nearly 2,000 feet. The whole building will be heated with two calorifères in the vaults. The hotel, which is, indeed, a perfect palace, will be comfortably arranged for visitors, either invalids suffering from chest affections, or from rheumatism or gout, at the time already mentioned. The baths in the new building, however, will not be finished until the end of January, or the beginning of February. The baths have been arranged in the old establishment, and invalids will be conveyed backwards and forwards in carriages. A hall, where they may rest after the bath, has also been prepared in the old establishment. There will be thus little or no danger of catching cold. Rheumatic or gouty persons will indeed be quite as well off here, even under the present conditions, as at most watering-places; when the new baths are completely finished, they will be very much better off than they are anywhere else.

The pleasure which we ourselves enjoyed during our stay at Hammam Rirha, and the benefit which our health derived from it, perhaps incline us to take a very favourable view of Hammam Rirha; yet

looking at it perfectly impartially, we see no reason for altering the opinion we have already expressed in the *Practitioner*, that there is at present no other watering-place to which patients suffering from gout and rheumatism can resort in winter. Helouân, near Cairo, may become such a resort in the future, but the accounts which we have received from visitors to it during last winter show us that is not at present quite suitable for invalids. Another advantage which Hammam Rirha possesses is the constant residence of a doctor who speaks English perfectly, and is thoroughly well acquainted with English habits. We believe that Dr. Brandt, of Royat, while continuing to reside there during the summer, as heretofore, has determined to settle permanently in Hammam Rirha during the winter. The prices at Hammam Rirha are as follows :—room with window looking to the south, 5 francs ; looking to the north, 4 francs ; déjeuner, 3 francs ; tea and coffee, 1 franc ; dinner, 4 francs ; service, 50 cents. ; bougie, 50 cents. These prices are for meals served in the *salle à manger* ; when they are taken in chambers the terms are somewhat higher.

IMPRESSIONS OF A VISITOR :—In the *Lancet* for March 5, 1881, Mr. Pollock gives such an admirable

description of Hammam Rirha,* that I have taken the liberty to reproduce it here.

"It may interest many of the readers of the *Lancet* to learn something of a warm health-resort in winter, within five days' easy journey of London, which at present is but little known in England, and which affords many advantages to invalids who require or desire something milder and more genial than the climate of an English winter and spring. While passing some few weeks lately in Algiers, I took advantage of fine weather to pay a visit to Hammam Rirha, celebrated for its hot springs, and their beneficial effects in rheumatism. 'The thermal springs of Hammam Rirha,' writes Colonel Playfair,† H.B.M. Consul at Algiers, 'occupy the site of the ancient Roman city of Aquæ Calidæ, the ruins of which cover the hill-side for a considerable distance.' The hotel and bathing establishment at Hammam Rirha stand some 2,000 feet above the sea level, near the summit of a broad face of mountain, looking south. The hot spring rises behind, and several

* "Hammam R'irha, Algeria : a Winter Health Resort," by G. D. Pollock, F.R.C.S. Eng., Surgeon in Ordinary to H.R.H. the Prince of Wales, Consulting Surgeon to St. George's Hospital.—*Lancet*, March 5, 1881.

† "Handbook for Travellers in Algeria and Tunis," second edition, p. 171. London : John Murray.

feet above the hotel, on sloping ground running back some distance on the north side of the building. The outflow is constant and abundant. The water is conducted directly to the hotel, through which it flows continuously night and day. The point at which the water issues from its source is some five minutes' walk from the hotel, and may be readily reached by an ascent among the ruins of the old Roman town. The spring is covered in, but is left open in front to permit the escape of steam, and for the convenience of taking water from the fountain-head. The visitor may here satisfy his curiosity as to its temperature by dipping in his fingers. A few seconds will convince him that the experiment is sufficient. The temperature is stated to be about 115° Fahr., but as my thermometer was broken I could not verify the exact point. The heat, however, is sufficient to render the water too hot for a bath without a certain reduction of temperature. The supply is sufficient to afford a continuous stream for two swimming-baths, for the use of men and women resident at the hotel, also for private baths, and three large baths for the use of the Arabs. Night or day a hot bath is available at a few minutes' notice, and the rush of water may be continuously heard—not an

unpleasant sound in the still night—as it pours from the pipes which discharge their contents into the large swimming-bath chambers. In 1841 the French military authorities established a hospital here for the use of soldiers; and in 1878 a very comfortable hotel, with bathing establishment, was opened for the use of civilians. Mons. Arlès-Dufour, the proprietor of this establishment, is under an engagement with the Algerian Government to convert the present hotel into a hospital for civilians, to contain sixty beds, thirty for each sex. This arrangement will be carried out as soon as a new hotel, now in process of building on the higher ground, is ready for the reception of visitors. This hospital is to be devoted to the treatment alone of such cases as are likely to be benefited by the use of the hot baths.

The waters of Hammam Rirha are, however, of two kinds. 1. The hot spring already mentioned, containing small quantities of sulphates and carbonates of lime and magnesia, &c. 2. A cold and slightly gaseous water used for drinking, containing small proportions of iron, soda, magnesia, &c. Mr. Squire has kindly offered to furnish me with an analysis of both waters, and when completed the results shall be forwarded to the *Lancet*.

The Arabs have great faith in the beneficial effects of the hot spring, and have recourse to the baths in various disorders. With them, however, it appears also to be somewhat of a religious ceremony to pay a visit once a year to Hammam Rirha, and 'to wash and be clean.' They have the belief that here is the tomb of some 'Marabout,' a holy man of ancient times, and that the said Marabout still supplies daily 2,000 camels to convey the wood necessary to feed the subterranean fires which heat this water for the physical, as well as spiritual, benefit of the faithful. There are distinct and separate baths for visitors at the hotel; for the Jews an establishment apart from the hotel; and for the Arabs in a building in front and below the hotel. Visitors need fear no annoyance or inconvenience from the latter, though they flock there in numbers. The situation of the present hotel is all one could desire as regards sanitary conditions; the new hotel will stand still higher. Below is the valley of Oued-Djer; through this valley runs a tortuous river. In rainy weather it is a great torrent; at the time of my visit it was but a slight stream. Beyond the valley, on the opposite side of the river, is a range of mountain well clothed with wood. Mountains also on either side—with the

remarkable Zakkar—affording to the artist a fine subject for his brush. It is altogether a beautiful outlook, and in spring-time the ground is a carpet of flowers. The ascent to the hotel from the road in the valley is a zigzag right and left ; for by no other mode of approach would this height be accessible in a carriage drawn by horses. The hotel affords every comfort to the traveller, or the invalid, that can be desired ; and here the sick man finds a climate, and advantages in light and air, which no place in England can ever give in winter, or, indeed, I might add, can be found in any part of Europe. The situation among the mountains, the dryness of the atmosphere and soil, the bright blue sky and glorious warm sun (tropical showers and occasional wet days excepted), the abundance of hot water for bathing—all these combined afford to a certain class of invalids, or delicate persons, a most charming combination : enjoyment waiting on convalescence, to be followed by that consummation, so devoutly to be wished, and sought, and secured—Health !

I would particularly recommend Hammam Rirha for a winter residence to those who suffer from those chronic forms of rheumatism which defy the attacks

of medicine and puzzle the cunning of the experienced prescriber. There is a secret in the atmosphere, or soil, or elevation, or in the action of the baths, or all combined, which, in such a situation, brings health and strength in a comparatively short time, where otherwise months might elapse before an equal amount of benefit would be attained elsewhere. I also think it would be equally beneficial in cases of chronic bronchitis, and especially to those who suffer from damp and cold. Here the invalid is sure of sunshine and warmth, and quite exempt from the frost and cold winds, which are too frequently met with on the south coast of France. Hammam Rirha offers a change and a charm which many may like to avail themselves of; and as a change, or even temporary residence, in winter, I know of no place offering similar advantages within the same distance and as accessible from London. Visitors should provide themselves with such dress as they would wear in England—light as well as warm clothing. As the sun goes down a great coat is more than a pleasant companion; it is a necessity to the invalid. In the winter evenings a fire is often agreeable, as also in rainy weather, but there are few days in which some amount of out-door exercise cannot be obtained.

Light clothing is the rule by day, warm clothing the exception.

Egypt offers many advantages in climate and interesting associations to the invalid traveller in winter ; but I doubt whether, as a winter residence and sanatorium, it offers such as are obtainable at Hammam Rirha. Travelling in Egypt is very costly, and the invalid has to travel a much greater distance to gain the object in view. Hammam Rirha may be reached through France in five days with comparatively easy travelling. The passenger who leaves London on Thursday morning may see Algiers harbour-lights by Sunday night, and on Monday morning take the train for Bou-Medfa station, where a carriage can be procured, which will deposit him at the hotel at Hammam Rirha in time for dinner. But a few days may be agreeably passed in Algiers, and advantage of this delay can be taken to secure accommodation at the hotel, as well as the carriage at the station, for those who prefer to travel by rail. Hammam Rirha is about sixty miles from Algiers. Those who can afford the time, and wish to see something more of the country than a railway train permits, may drive the distance, as I did, in two days.

The idle Rambler would probably find himself

satisfied with a few days' residence at Hammam Rirha, but for the invalid, who would shun cold and damp for sun and warmth in winter, this may be made a most enjoyable residence for many weeks. Books can be procured from Algiers; letters and newspapers are daily delivered at 11 A.M.; the post leaves at five, and a telegraph office is attached to the hotel. The walks and rides, though not offering much variety, are sufficient in extent and picturesqueness to satisfy all who find their reward in renovation of health. For those unable to walk much there are verandahs to sit in, and gardens to stroll about, which enable the weaker ones to enjoy the open air without fatigue. A forest of some 1,800 acres near the hotel affords a pleasant walk, and no fear of molestation from Arabs or live lions need be entertained. The former are well conducted, and not obtrusive; the latter are now "an unknown quantity" in this part of Africa. The water from the cold spring is pleasant to drink, and an agreeable addition to the vin ordinaire of the table d'hôte. It is supplied in all the bedrooms, and at meals, without extra charge. With some persons it acts slightly as an aperient, and, as it contains a small percentage of iron, is said to be useful in cases of chlorosis, &c.

Hammm Rirha affords much that is of interest to the antiquarian. The excavations for the foundations of the new hotel have exposed the walls and basement of many an old Roman house. Stone coffins, corn-mill, and numerous coins have also been found, and are to be placed in a museum to be attached to the future hotel.

The charges at the present hotel are very moderate—nine francs a day for board and lodging. The table d'hôte is excellent, the bedrooms clean and comfortable, and a spacious glazed-in verandah looking south, with a cheerful drawing-room, make up the internal accommodation.

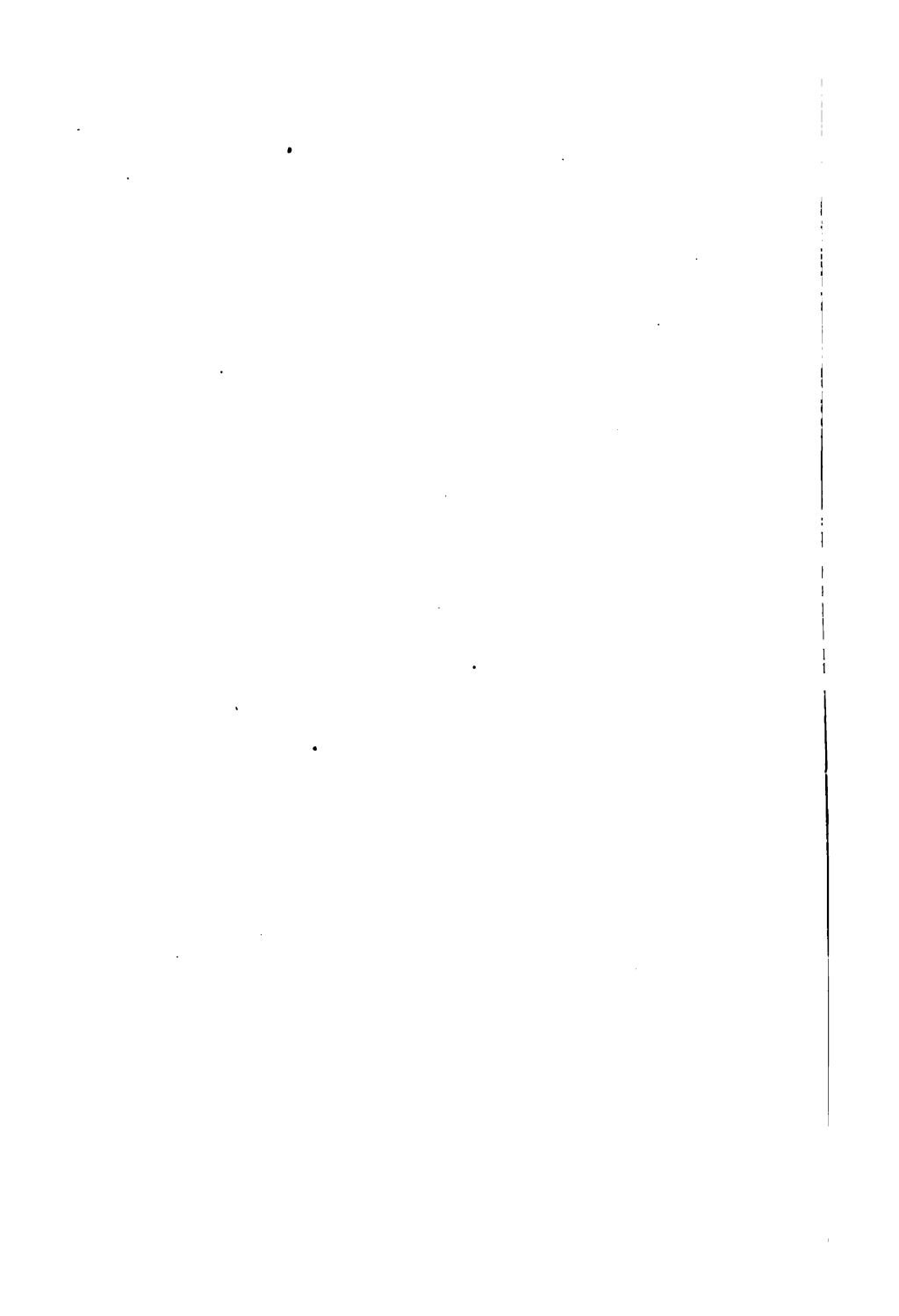
The railway from Algiers to Oran affords the visitor at Hammm Rirha a ready mode of seeing much of the country, should inclination direct, and health and pocket permit. If he requires further information on this point he cannot do better than consult an interesting book lately published—'The New Playground, or Wanderings in Algeria.'* As to cost, the journey *viâ* Paris and Marseilles from London to Hammm Rirha may be put down at £20 for each person travelling first class. Something more must be added if the traveller rests on his journey. Those

* By Alex. A. Knox. London: C. Kegan Paul & Co.

who do not object to the sea may go direct to Algiers from London by steamer. The British India boats occupy about ten days in the passage, and on this route a visit to Lisbon is not to be lost sight of, and 'is thrown in gratis.'

Individually I owe much to the climate of Africa. A severe sufferer from rheumatism, in August last I was induced, with kind friends, to pass two months on the south coast of the Mediterranean, and as a result returned in full health and strength to encounter the effects of an almost arctic winter 'without let or hindrance.' I feel I cannot do a greater service than point to the great advantages of such a climate in winter, in convalescence, or in such conditions as have above been referred to. I would say to all who can afford the time and the cost, 'go and do likewise.'"

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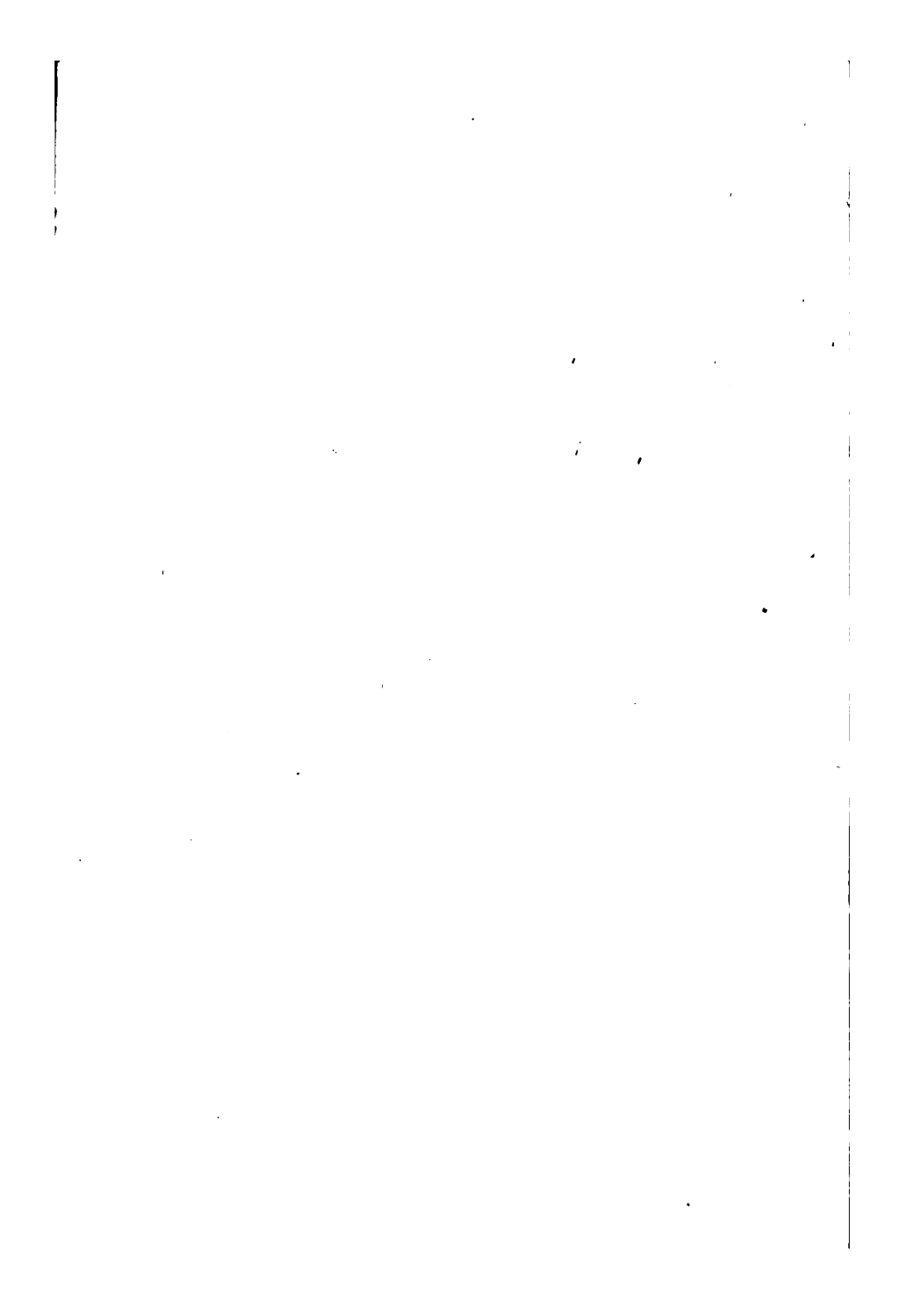
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